LAW OFFICE OF

ROBERT W. KAYLOR, P.A.

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July 6, 2023

VIA ELECTRONIC FILING

Ms. A. Shonta Dunston, Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, NC 27699-4300

RE: Duke Energy Progress, LLC's Monthly Fuel Report

Docket No. E-2, Sub 1310

Dear Ms. Dunston:

Commission Rule R8-52 requires that on or before the 15th day of each month, each public utility that uses fossil and/or nuclear fuel in the generation of electric power for providing North Carolina retail electric service shall file a fuel report for the second preceding month for review by the Commission, the Public Staff, and any other interested party. Enclosed for filing with the Commission please find Duke Energy Progress, LLC's monthly fuel report pursuant to NCUC Rule R8-52 for the month of May 2023.

Should you have any questions or need further assistance, please contact me.

Sincerely,

Robert W. Kaylor

Robert W. Koyla.

RWK/gsf Enclosures

DUKE ENERGY PROGRESS SUMMARY OF MONTHLY FUEL REPORT

Docket No. E-2, Sub 1310

Line No.	Fuel Expenses:		May 2023	12 Months Ended May 2023
1	Total Fuel and Fuel-Related Costs	\$	107,473,530	\$ 2,131,665,218
	MWH sales:			
2	Total System Sales		4,902,980	67,168,734
3	Less intersystem sales		679,003	6,820,257
4	Total sales less intersystem sales		4,223,977	60,348,477
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)		2.544	3.532
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4, Line 5a Total)		2.589	
	Generation Mix (MWH):			
	Fossil (By Primary Fuel Type):			
7	Coal		84,481	4,599,010
8	Oil		2,584	135,385
9	Natural Gas - Combustion Turbine		63,660	2,320,614
10	Natural Gas - Combined Cycle		1,516,139	21,321,059
11	Biogas		689	9,809
12	Total Fossil		1,667,553	28,385,877
13	Nuclear		2,723,421	29,109,900
14	Hydro - Conventional		50,988	596,594
15	Solar Distributed Generation		24,795	244,843
16	Total MWH generation	 	4,466,757	58,337,214

Notes:

^{*} Current 12ME includes a fuel proxy adjustment increasing fuel costs by \$114,671 in the month of December 2022.

DUKE ENERGY PROGRESS DETAILS OF FUEL AND FUEL-RELATED COSTS

Docket No. E-2, Sub 1310

Description	May 2023	12 Months Ended May 2023
Fuel and Fuel-Related Costs:		
Steam Generation - Account 501		
0501110 coal consumed - steam	\$ 5,862,587	\$ 181,682,201
0501310 fuel oil consumed - steam	1,283,364	13,189,767
Total Steam Generation - Account 501	7,145,951	194,871,968
Nuclear Generation - Account 518		
0518100 burnup of owned fuel	17,041,569	178,079,690
Other Generation - Account 547		
0547000 natural gas consumed - Combustion Turbine	3,863,201	201,258,147
0547000 natural gas consumed - Combined Cycle	49,394,189	1,235,931,305
0547106 biogas consumed - Combined Cycle	36,520	471,457
0547200 fuel oil consumed	60,709	21,708,556
Total Other Generation - Account 547	53,354,619	1,459,369,465
Reagents		
Reagents (lime, limestone, ammonia, urea, dibasic acid, and sorbents)	248,203	11,689,181
Total Reagents	248,203	11,689,181
By-products		
Net proceeds from sale of by-products	1,070,628	14,443,592
Total By-products	1,070,628	14,443,592
Total Fossil and Nuclear Fuel Expenses		
Included in Base Fuel Component	78,860,970	1,858,453,896
Purchased Power and Net Interchange - Account 555		
Capacity component of purchased power (PURPA)	3,573,925	52,560,772
Capacity component of purchased power (renewables)	2,550,688	31,144,072
Fuel and fuel-related component of purchased power	34,774,038	651,589,889
Total Purchased Power and Net Interchange - Account 555	40,898,651	735,294,733
Less:		
Fuel and fuel-related costs recovered through intersystem sales	12,283,982	461,419,448
Solar Integration Charge	11	162
Miscellaneous Fees Collected	2,100	663,800
Total Fuel Credits - Accounts 447/456	12,286,093	462,083,410
Total Fuel and Fuel-Related Costs	\$ 107,473,530	\$ 2,131,665,218

^{*} Current 12ME includes a fuel proxy adjustment increasing fuel costs by \$114,671 in the month of December 2022.

DUKE ENERGY PROGRESS PURCHASED POWER AND INTERCHANGE SYSTEM REPORT - NORTH CAROLINA VIEW

Schedule 3, Purchases Page 1 of 4

May 2023

Purchased Power		Total	Capacity				Non	-ca _l	pacity		
Economic Purchases		\$		\$	mWh		Fuel \$	F	uel-related \$		Not Fuel \$ Fuel-related \$
Broad River Energy, LLC	\$	1,476,023	\$	1,027,725	6,889	\$	304,994	\$	143,304		-
City of Fayetteville		460,147		294,250	1,947		165,897		· -		-
DE Carolinas - Native Load Transfer		1,106,240		, <u>-</u>	38,383		763,407		132,125	\$	210,708
DE Carolinas - Native Load Transfer Benefit		96,283		-	, <u>-</u>		96,283		, -		, <u>-</u>
DE Carolinas - Fees		, <u>-</u>		_	-		· -		-		_
Haywood EMC		27,750		27,750	-		-		-		-
NCEMC		1,861,603		1,211,299	8,575		618,954		31,350		_
PJM Interconnection, LLC		4		-	, <u>-</u>		· -		4		-
Southern Company Services		4,162,705		1,189,175	100,261		2,501,393		472,137		_
	\$	9,190,755	\$	3,750,199	156,055	\$	4,450,928	\$	778,920	\$	210,708
Renewable Energy Purchases											
NC REPS	\$	11,874,840		_	181,357		_	\$	11,874,840		_
SC DERP Qualifying Facilities	Ψ	160,925		_	3,977		_	Ψ	160,069	¢	856
SC DERP Net Metering Excess Generation		100,925	\$	13	3,977		_		100,009	Ψ	42
SC Act 62 Net Metering Excess Generation		2,549	Ψ	13	95		_		-		2,549
30 Act 02 Net Wetering Excess Generation	\$	12,038,369	\$	13	185,431	\$		\$	12,034,909	\$	3,447
HB589 PURPA Purchases											
NC Other Qualifying Facilities	\$	23,784,599		=	471,023		-	\$	23,784,599		=
NC CPRE - Purchased Power		500,702		<u> </u>	15,095		-		-	\$	500,702
	\$	24,285,301	\$	<u> </u>	486,118	\$	-	\$	23,784,599		500,702
Non-dispatchable Purchases											
DE Carolinas - Emergency	\$	(88,952)		_	89	\$	(75,609)		-	\$	(13,343)
DE Carolinas - Reliability	•	(97,200)		_	-	•	(82,620)		_	·	(14,580)
Dominion Energy South Carolina - Emergency		-		-	-		-		-		-
PJM Interconnection, LLC - Reliability		_		_	-		_		-		_
Virginia Electric and Power Company - Emergence		-		=	-		=		-		=
Energy Imbalance		8,273		=	427		7,424		-		849
Generation Imbalance		118		=	36		100		-		18
	\$	(177,761)	\$	-	552	\$	(150,705)		-	\$	(27,056)
Total Purchased Power	\$	45,336,664	\$	3,750,212	828,156	\$	4,300,223	\$	36,598,428	\$	687,801

CPRE purchased power amounts are recovered through the CPRE Rider.

[&]quot;Not Fuel \$/Not Fuel-related \$" amounts are based on estimates and are subject to change.

Schedule 3, Sales

Page 2 of 4

DUKE ENERGY PROGRESS INTERSYSTEM SALES* SYSTEM REPORT - NORTH CAROLINA VIEW

May 2023

Total Capacity Non-capacity Sales \$ \$ mWh Fuel \$ Non-fuel \$ **Utilities:** DE Carolinas - As Available Capacity \$ 3,635 \$ 3,635 DE Carolinas - Emergency Dominion Energy South Carolina, Inc. - Emergency 180 \$ 180 South Carolina Public Service Authority - Emergency Market Based: 652,500 NCEMC Purchase Power Agreement 1,094,365 13,369 \$ 231,452 210,413 PJM Interconnection, LLC 874,677 25,350 475,683 398,994 Other: DE Carolinas - Native Load Transfer 10,065,482 640,248 9,260,449 805,034 2,316,398 DE Carolinas - Native Load Transfer Benefit 2,316,398 Generation Imbalance (1,021)36 (1,021)**Total Intersystem Sales** 14,353,716 656,135 679,003 \$ 12,283,982 \$ 1,413,600

^{*} Sales for resale other than native load priority.

DUKE ENERGY PROGRESS PURCHASED POWER AND INTERCHANGE SYSTEM REPORT - NORTH CAROLINA VIEW

Twelve Months Ended May 2023 Schedule 3, Purchases Page 3 of 4

Economic Purchases Broad River Energy, LLC											
	Economic Purchases \$				mWh		F l ft	_	·		Not Fuel \$
	\$	135,002,316	\$	\$ 34,297,656	1.044.686	¢	Fuel \$ 92,347,636		8.357.024	NOU	Fuel-related \$
City of Fayetteville	Φ	20,362,497	Φ	12,278,500	53,029	φ	6,628,838	φ	1,455,159		-
DE Carolinas - Native Load Transfer		74,620,627		2,083	1,200,018		64.227.911		10,268,708	¢.	121,925
DE Carolinas - Native Load Transfer Benefit		7,532,388		2,003	1,200,016		7,532,388		10,200,700	Φ	121,925
DE Carolinas - Native Load Transier Beriefit DE Carolinas - Fees		147,664		-	-		1,332,366		147,664		-
Haywood EMC		362,615		362,615	-		-		147,004		-
NCEMC		80,924,101		40,297,577	- 425,211		39,900,297		726,227		-
PJM Interconnection, LLC				40,297,377	5,150				,		-
•		684,886		-	,		567,307		117,579		-
Southern Company Services	_	151,568,159	_	25,809,432	1,887,962	_	116,365,317	_	9,393,410		404.005
	\$	471,205,253	\$	113,047,863	4,616,056	\$	327,569,694	\$	30,465,771	\$	121,925
Renewable Energy Purchases											
NC REPS	\$	138,081,825		-	2,094,186		-	\$	138,081,825		_
SC DERP Qualifying Facilities	·	1,266,467		_	30,223		-	·	1,211,312	\$	55,154
SC DERP Net Metering Excess Generation		38,316	\$	9,350	1,141		_		-	·	28,966
SC Act 62 Net Metering Excess Generation		9,247	•	-	369		_		_		9,247
	\$	139,395,855	\$	9,350	2,125,919		-	\$	139,293,137	\$	93,367
HB589 PURPA Purchases											
NC Other Qualifying Facilities	\$	228,147,842		_	3,896,036		_	\$	228,147,842		_
NC CPRE - Purchased Power	Ψ	4,957,808		_	155,392		_	Ψ		\$	4,957,808
THO OF THE F GRONDS OF THE	\$	233,105,650		-	4,051,428		-	\$	228,147,842	Ψ	4,957,808
New Weststelle Bouchage											
Non-dispatchable Purchases	•	040.004			5.050	•	450,000			Φ.	50.405
DE Carolinas - Emergency	\$	210,034	•	- 0.040	5,250	\$	159,909		-	\$	50,125
DE Carolinas - Reliability		11,221,716	\$	8,013	93,545		9,449,469		-		1,764,234
Dominion Energy South Carolina - Emergency		-		-	- 0.400		-		-		-
PJM Interconnection, LLC - Reliability		615,271		-	6,438		522,980		-		92,291
Virginia Electric and Power Company - Emergen	IC!	(000 444)		-			(407.007)		-		(400.004)
Energy Imbalance		(636,411)		=	3,785		(497,327)		-		(139,084)
Generation Imbalance	_	195,994			5,550		183,260		-	_	12,735
	\$	11,606,604		8,013	114,568	\$	9,818,290		-	\$	1,780,302
Total Purchased Power	\$	855,313,362	\$	113,065,226	10,907,971	\$	337,387,984	\$	397,906,750	\$	6,953,402

NOTE: Detail amounts may not add to totals shown due to rounding.

CPRE purchased power amounts are recovered through the CPRE Rider.

[&]quot;Not Fuel \$/Not Fuel-related \$" amounts are based on estimates and are subject to change.

^{*}Current 12ME includes a fuel proxy adjustment increasing fuel costs and decreasing non-fuel costs by \$114,671 in the month of December 2022.

DUKE ENERGY PROGRESS INTERSYSTEM SALES* SYSTEM REPORT - NORTH CAROLINA VIEW

Twelve Months Ended May 2023 Schedule 3, Sales Page 4 of 4

-	 Total	 Capacity	Non-capacity						
Sales	\$	\$	mWh	Fuel \$		Non-fuel \$			
Utilities:	 								
DE Carolinas - As Available Capacity	\$ 213,650	\$ 213,650	-	-		-			
DE Carolinas - Emergency	30,606	-	177	-	\$	30,606			
Dominion Energy South Carolina, Inc Emergency	1,522,411	-	2,484	\$ 1,188,547		333,864			
South Carolina Public Service Authority - Emergency	-	-	-	-		-			
Market Based:									
NCEMC Purchase Power Agreement	15,482,404	7,830,000	134,381	11,779,098		(4,126,694)			
PJM Interconnection, LLC	3,133,960	-	111,524	2,809,213		324,747			
Other:									
DE Carolinas - Native Load Transfer	419,453,839	-	6,570,835	406,479,946		12,973,894			
DE Carolinas - Native Load Transfer Benefit	39,064,068	_	-	39,064,068		_			
Generation Imbalance	53,844	-	856	98,576		(44,732)			
Total Intersystem Sales	\$ 478,954,782	\$ 8,043,650	6,820,257	\$ 461,419,448	\$	9,491,685			

^{*} Sales for resale other than native load priority.

DUKE ENERGY PROGRESS (OVER) / UNDER RECOVERY OF FUEL COSTS MAY 2023

Line No.		[Residential	Small General Service	Medium General Service	Large General Service	Lighting	Total
1	System Retail kWh sales System kWh Sales at generation	Input Input						4,223,977,155 4,349,351,011
2	2a. DERP Net Metered kWh generation	Input						2,130,470
	Line loss percentage from Cost of Service DERP Net Metered kWh at generation	Input Annually L2a / (1 - 2b)						3.261% 2,202,287
3	Adjusted System kWh sales	L1b + L2c						4,351,553,298
4	4a. N.C. Retail kWh sales	Input	965,158,898	134,632,899	793,825,921	645,915,968	27,439,896	2,566,973,582
	4b. Line loss percentage from Cost of Service	Input Annually	3.785%	3.779%	3.620%	2.760%	3.745%	
	4c. NC kWh Sales at generation	L4a / (1 - L4b)	1,003,127,265	139,920,495	823,641,752	664,249,247	28,507,501	2,659,446,260
	Ad. NC allocation % by customer class NC retail % of actual system total	Calculated	37.719%	5.261%	30.970%	24.977%	1.072%	
	4f. NC retail % of adjusted system total	L4c NC Total / L1b Total System L4c NC Total / L3 Total System						61.146% 61.115%
5	Approved fuel and fuel-related rates (¢/kWh)							
	5a Billed rates by class (¢/kWh)	Input Annually	2.807	3.096	2.579	2.138	3.370	2.589
	5b Billed fuel expense	L4a * L5a / 100	\$27,094,011	\$4,167,909	\$20,472,081	\$13,810,408	\$924,627	\$66,469,036
	Rate changes:							
	5c New approved rates	Input Annually	2.808	3.097	2.580	2.138	3.376	
	5d Ratio of days to new rate	Input	99.88%	99.87%	99.74%	100.09%	99.62%	
	5e Prior approved rates	Input Annually	2.126	2.111	2.169	2.019	1.682	
	5f Ratio of days to old rate	Input	0.12% 2.807	0.13% 3.096	0.26% 2.579	-0.09%	0.38%	
	5g Total prorated ¢/KWH	(L5c * L5d) + (L5e * L5f)	2.807	3.096	2.5/9	2.138	3.370	
6	Incurred base fuel and fuel-related (less renewable purchased power capaci	.,						
	6a NC Docket E-2, Sub 1292 allocation factor	Input Annually	46.478%	5.552%	26.799%	19.831%	1.339%	100.000%
	6b System incurred expense	Input						\$101,396,744
	6c NC incurred expense by class	L4f * L6a * L6b	\$28,802,049	\$3,440,335	\$16,607,157	\$12,289,058	\$830,021	\$61,968,620
	6d NC Incurred base fuel rates (¢/kWh)	L6c / L4a * 100	2.984	2.555	2.092	1.903	3.025	2.414
7	Incurred renewable purchased power capacity rates (¢/kWh)	land Association						61.153%
	7a NC retail production plant % 7b Production plant allocation factors	Input Annually Input Annually	54.15%	5.98%	25.19%	14.69%	0.00%	100.000%
	7c System incurred expense	Input	34.1376	3.90 /6	23.1970	14.03%	0.00 /6	6,124,613
	7d NC incurred renewable capacity expense	L7a* L7b* L7c	\$2.028.189	\$223.788	\$943.284	\$550.097	\$0	\$3.745.358
	7e NC incurred rates by class	L7d / L4a * 100	0.210	0.166	0.119	0.085	-	0.146
8	Total incurred rates by class (¢/kWh)	L6h + 7e	3.194	2.722	2.211	1.988	3.025	
9	Difference in ¢/kWh (incurred - billed)	L8 - L5a	0.387	(0.374)	(0.368)	(0.150)	(0.345)	
10	(Over) / under recovery [See footnote]	L9 * L4a / 100	\$3,736,228	(\$503,785)	(\$2,921,640)	(\$971,253)	(\$94,606)	(\$755,056)
11	Adjustments	Input						
12	Total (over) / under recovery [See footnote]	L10 + L11	\$3,736,228	(\$503,785)	(\$2,921,640)	(\$971,253)	(\$94,606)	(\$755,056)
13	Total System Incurred Expenses							\$107,521,357
14	Less: Jurisdictional allocation adjustment	Input						47,827
15	Total Fuel and Fuel-related Costs per Schedule 2							\$107,473,530
16	(Over) / under recovery for each month of the current test period [See footn	ote]						

			(Over) /	Under Recovery			
	Total To Date	Residential	Small General Service	Medium General Service	Large General Service	Lighting	Total Company
April 2023	(\$3,351,060)	779,881	(303,071)	(2,812,021)	(934,156)	(81,693)	(\$3,351,060)
May 2023	(\$4,106,116)	3,736,228	(503,785)	(2,921,640)	(971,253)	(94,606)	(\$755,056)
June 2023							
July 2023							
August 2023							
September 2023							
October 2023							
November 2023							
December 2023							
January 2024							
February 2024							
March 2024							
Total		\$4,516,109	(\$806,856)	(\$5,733,661)	(\$1,905,409)	(\$176,299)	(\$4,106,116)

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

Presentation of (over)/under collected amounts reflects a regulatory asset or liability. Over collections, or regulatory liabilities, are shown as negative amounts. Under collections, or regulatory assets, are shown as positive amounts. Includes prior period adjustments.

Duke Energy Progress Fuel and Fuel Related Cost Report MAY 2023

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Page	1	of	2

Description		Mayo		Roxboro		Asheville CC/CT		Smith Energy Complex	Sutton CC/CT	Lee CC	Blewett
Description		Steam		Steam		CC/C1		CC/CT	CC/C1	CC	CI
Cost of Fuel Purchased (\$)	•	0.054.070	•	44.004.000							
Coal	\$	9,351,379	\$	11,094,900		-		-	-	-	-
Oil		968,339		398,491		-		-	-	-	\$
Gas - CC		-		-	\$		\$	13,520,260 \$		\$ 16,568,188	-
Gas - CT		-		-		125,780		3,536,154	140,086	-	-
Biogas		-		-		-		213,409	-	-	-
Total	\$	10,319,718	\$	11,493,391	\$	6,834,666	\$	17,269,823 \$	12,736,941	\$ 16,568,188	\$
Average Cost of Fuel Purchased (¢/MBT	U)	404.00		524.00							
Coal		434.38		531.06		-		-	-	-	-
Oil		2,407.13		2,411.15		-		-	-	-	-
Gas - CC		-		-		550.05		401.76	513.19	438.81	-
Gas - CT		-		-		1,121.13		419.41	36,480.73	-	-
Biogas		-		-		-		4,584.51	-	-	-
Weighted Average		470.57		545.81		555.25		409.91	518.82	438.81	-
Cost of Fuel Burned (\$)											
Coal	\$	2,397,849	\$	3,464,738		_		_	_	_	_
Oil - CC	Ψ	2,007,040	Ψ	-		_		_			
Oil - Steam/CT		979,843		303,521	\$	1,572	¢	5,652	-	-	\$ 15,48
Gas - CC		919,043		303,321	φ		φ		40 500 055	± 40 500 400	φ 15,46
		-		-		6,708,886		13,520,260 \$		\$ 16,568,188	-
Gas - CT		-		-		125,780		3,536,154	140,086	-	-
Biogas		-		-		-		213,409	-	-	-
Nuclear		-		-		-		-	-	-	-
Total	\$	3,377,692	\$	3,768,259	\$	6,836,238	\$	17,275,475 \$	12,736,941	\$ 16,568,188	\$ 15,48
Average Cost of Fuel Burned (¢/MBTU)											
Coal		382.03		401.34		-		-	-	-	
Oil - CC		-		-		-		-	-	-	
Oil - Steam/CT		2,535.69		2,595.31		2,346.27		1,922.45	-	-	1,841.7
Gas - CC						550.05		401.76	513.19	438.81	
Gas - CT		_		_		1,121.13		419.41	36,480.73	-	
Biogas						1,121.10		4,584.51	00,400.70		
Nuclear		-		-		-		4,304.31	-	-	
Weighted Average	_	506.93		430.66		555.35		410.02	518.82	438.81	1,841.7
Weighted Average		300.93		430.00		333.33		410.02	310.02	430.01	1,041.7
Average Cost of Generation (¢/kWh)											
Coal		6.82		7.02		-		-	-	-	
Oil - CC		-		-		-		-	-	-	
Oil - Steam/CT		45.27		83.02		32.33		21.60	-	-	96.8
Gas - CC		-		-		3.58		2.81	3.71	3.26	
Gas - CT		-		-		17.42		5.64	875.54	-	
Biogas		-		-		-		30.96	-	-	
Nuclear		-		-		-		-	-	-	
Weighted Average		9.05		7.58		3.63		3.17	3.75	3.26	96.8
D											
Burned MBTU's		207.000		000 000							
Coal		627,668		863,302		-		-	-	-	-
Oil - CC		-		-		-		-	-	-	-
Oil - Steam/CT		38,642		11,695		67		294	-	-	84
Gas - CC		-		-		1,219,693		3,365,257	2,454,614	3,775,714	-
Gas - CT		-		-		11,219		843,122	384	-	-
Biogas		-		-		-		4,655	-	-	-
Nuclear		-		-		-		-	-	-	-
Total		666,310		874,997		1,230,979		4,213,328	2,454,998	3,775,714	84
Net Committee (mWh)											
Net Generation (mWh) Coal		35,159		49,321		_		_			
						-			-	-	-
Oil - CC		-		-				-	-	-	
Oil - Steam/CT		2,165		366		5		26	-	<u>-</u>	1
Gas - CC		-		-		187,613		481,016	339,366	508,144	-
Gas - CT		-		-		722		62,693	16	-	-
Biogas		-		-		-		689	-	-	-
Nuclear		-		-		-		-	-	-	-
Hydro (Total System)											
Solar (Total System)											
Total		37,324		49,687		188,340		544,424	339,382	508,144	1
Cost of Reagents Consumed (\$)											
Cost of Reagents Consumed (\$)	ď	44 240	æ	20 502			e	16 701			
Ammonia	\$	14,349	\$	39,583		-	\$	16,701	-	-	-
Limestone		86,486		51,193		-		-	-	-	-
Re-emission Chemical		-		-		-		-	-	-	-
Sorbents		39,890		-		-		-	-	-	-
Urea	_	-		-		-		-	<u>-</u>	-	-
Total	\$	140,725	\$	90,776	\$	-	\$	16,701 \$	-	\$ -	\$ -

Notes

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

Re-emission chemical reagent expense is not recoverable in NC.

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Duke Energy Progress Fuel and Fuel Related Cost Report MAY 2023

Description		ington CT	Wayı	ne County CT	We	atherspoon CT	Brunswick Nuclear	Harris Nuclear	Robinson Nuclear	Current Month	Total 12 ME MAY 2023
Cost of Fuel Purchased (\$)										000 440 070	0044 040 575
Coal		-		-		-	-	-	-	\$20,446,279	\$241,248,575
Oil		-	\$	(942)	\$	9	-	-	-	1,365,899	50,862,903
Gas - CC		-		-		-	-	-	-	49,394,189	1,235,931,305
Gas - CT	\$	562		60,595		24	-	-	-	3,863,201	201,258,147
Biogas		-		-		-	-	-	-	213,409	2,841,620
Total	\$	562	\$	59,653	\$	33	\$ - \$	-	\$ -	\$75,282,977	\$1,732,142,550
Average Cost of Fuel Purchased (¢/MBTU	J)									404.00	442.00
Coal		-		-		-	-	-	-	481.99	443.98
Oil		-		-		-	-	-	-	2,406.66	2,646.30
Gas - CC		-				-	-	-	-	456.71	808.86
Gas - CT		-		537.19		-	-	-	-	446.09	779.76
Biogas		-		-		-	-	-	-	4,584.51	3,913.86
Weighted Average		-		528.84		-	-	-	-	470.97	737.27
Cost of Fuel Burned (\$)											
Coal		-		-		-	-	-	-	\$5,862,587	\$181,682,201
Oil - CC		-		-		-	-	-	-	-	874,866
Oil - Steam/CT		-		-	\$	37,997	-	-	-	1,344,074	34,023,459
Gas - CC		-		-		-	-	-	-	49,394,189	1,235,931,305
Gas - CT	\$	562	\$	60,595		24	-	-	-	3,863,201	201,258,147
Biogas		-		-		-	-	-	-	213,409	2,841,620
Nuclear		-		-		-	\$ 9,171,968	\$ 4,222,178	\$ 3,647,423	17,041,569	178,079,693
Total	\$	562	\$	60,595	\$	38,021	\$ 9,171,968	\$ 4,222,178	\$ 3,647,423	\$77,719,029	\$1,834,691,291
Average Cost of Fuel Burned (¢/MBTU)											
Coal		-		-		-	-	-	-	393.21	340.98
Oil - CC		-		-		-	-	-	-	-	2,354.20
Oil - Steam/CT		-		-		2,068.43	-	-	-	2,518.12	2,133.38
Gas - CC		-		-		-	-	-	-	456.71	808.86
Gas - CT		-		537.19		-	-	-	-	446.09	779.76
Biogas		-		-		-	-	-	-	4,584.51	3,913.86
Nuclear		-		-		-	62.14	56.48	61.50	60.50	58.87
Weighted Average		-		537.19		2,069.73	62.14	56.48	61.50	187.74	342.24
Average Cost of Generation (¢/kWh)											
Coal		-		-		-	-	-	-	6.94	3.95
Oil - CC		-		-		-	-	-	-	-	27.41
Oil - Steam/CT		-		-		542.81	-	-	-	52.01	25.74
Gas - CC		-		-		-	-	-	-	3.26	5.80
Gas - CT		-		15.99		-	-	-	-	6.07	8.67
Biogas		-		-		-	-	-	-	30.96	28.97
Nuclear		-		-		-	0.65	0.58	0.63	0.63	0.61
Weighted Average		-		15.99		543.16	0.65	0.58	0.63	1.74	3.14
Burned MBTU's											
Coal		-		-		-	-	-	-	1,490,970	53,282,237
Oil - CC		-		-		-	-	-	-	-	37,162
Oil - Steam/CT		-		-		1,837	-	-	-	53,376	1,594,812
Gas - CC		-		-		-	-	-	-	10,815,278	152,798,795
Gas - CT		-		11,280		_	-	_	_	866,005	25,810,187
Biogas		_		-		-	-	_	_	4,655	72,604
Nuclear		_		_		_	14,759,368	7,475,409	5,931,102	28,165,879	302,484,327
Total		-		11,280		1,837	14,759,368	7,475,409	5,931,102	41,396,163	536,080,124
Net Generation (mWh)											
Coal		-		-		-	-	-	-	84,481	4,599,010
Oil - CC		-		-		-	-	-	-	-	3,192
Oil - Steam/CT		-		-		7	-	-	-	2,584	132,193
Gas - CC		-		-		-	-	-	-	1,516,139	21,321,059
Gas - CT		(150)		379		-	-	-	-	63,660	2,320,614
Biogas		- '		-		-	-	-	-	689	9,809
Nuclear		-		-		-	1,411,322	731,938	580,161	2,723,421	29,109,900
Hydro (Total System)								,		50,988	596,594
Solar (Total System)										24,795	244,843
Total		(150)		379		7	1,411,322	731,938	580,161	4,466,757	58,337,214
		(/						. ,	-, -		
Cost of Reagents Consumed (\$)											
Ammonia		-		-		-	-	-	-	\$70,633	\$2,741,680
Limestone		-		-		-	-	-	-	137,679	6,843,801
Re-emission Chemical		-		-		-	-	-	-	-	0
Sorbents		-		-		-	-	-	-	39,890	2,103,697
Urea				-						0	0
Total	\$	-	\$	-	\$	-	\$ - \$	-	\$ -	\$248,202	\$11,689,178

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report MAY 2023

Schedule 6 Page 1 of 2

				Smith Energy			
Description	Mayo	Roxboro	Asheville	Complex	Sutton	Lee	Blewett
Coal Data:							
Beginning balance	331,116	1,039,831	-	-	-	-	-
Tons received during period	85,797	85,315	-	-	-	-	-
Inventory adjustments	-	-	-	-	-	-	-
Tons burned during period	24,953	34,704	-	-	-	-	-
Ending balance	391,960	1,090,442	-	-	-	-	-
MBTUs per ton burned	25.15	24.88	-	-	-	-	-
Cost of ending inventory (\$/ton)	96.09	99.74	-	-	-	-	-
Oil Data:							
Beginning balance	226,595	360,235	4,676,095	7,892,043	1,954,810	-	777,262
Gallons received during period	291,504	119,762	-	-	-	-	-
Miscellaneous use and adjustments	(1,320)	(7,500)	-	-	-	-	-
Gallons burned during period	280,472	85,317	488	2,101	-	-	6,007
Ending balance	236,307	387,180	4,675,607	7,889,942	1,954,810	-	771,256
Cost of ending inventory (\$/gal)	3.49	3.56	3.22	2.69	2.80	-	2.58
Natural Gas Data:							
Beginning balance	-	-	-	-	-	-	-
MCF received during period	-	-	1,192,804	4,074,745	2,377,018	3,654,877	-
MCF burned during period	-	-	1,192,804	4,074,745	2,377,018	3,654,877	-
Ending balance	-	-	-	-	-	-	-
Biogas Data:							
Beginning balance	-	-	-	-	-	-	-
MCF received during period	-	-	-	4,508	-	-	-
MCF burned during period	-	-	-	4,508	-	-	-
Ending balance	-	-	-	-	-	-	-
Limestone/Lime Data:							
Beginning balance	17,647	57,264	-	-	-	-	-
Tons received during period	-	13,624	-	-	-	-	-
Inventory adjustments	-	-	-	-	-	-	-
Tons consumed during period	1,453	1,101	-	-	-	-	-
Ending balance	16,196	69,787	-	-	-	-	-
Cost of ending inventory (\$/ton)	59.87	46.46	-	-	-	-	-

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

Duke Energy Progress Fuel & Fuel-related Consumption and Inventory Report MAY 2023

e Energy Progress	Schedule 6
Consumption and Inventory Report	Page 2 of 2
MAY 0000	

Description	Darlington	Wayne County	Weatherspoon	Brunswick	Harris	Robinson	Current Month	Total 12 ME May 2023
<u> </u>	Ţ.							
Coal Data:								
Beginning balance	-	-	-	-	-	-	1,370,947	1,090,162
Tons received during period	-	-	-	-	-	-	171,112	2,431,192
Inventory adjustments	-	-	-	-	-	-	-	59,158
Tons burned during period	-	-	-	-	-	-	59,657	2,098,113
Ending balance	-	-	-	-	-	-	1,482,402	1,482,402
MBTUs per ton burned	-	-	-	-	-	-	24.99	25.40
Cost of ending inventory (\$/ton)	-	-	-	-	-	-	98.77	98.77
Oil Data:								
Beginning balance	7,274,878	10,039,568	579,018	-	120,897	-	33,901,401	31,977,782
Gallons received during period	-	-	-	-	-	-	411,266	13,927,833
Miscellaneous use and adjustments	-	-	-	-	-	-	(8,820)	(91,386)
Gallons burned during period	-	-	13,128	-	-	-	387,513	11,897,894
Ending balance	7,274,878	10,039,568	565,890	-	120,897	-	33,916,335	33,916,335
Cost of ending inventory (\$/gal)	2.39	2.90	2.89	-	2.31	-	2.78	2.78
Natural Gas Data:								
Beginning balance	-	-	_	-	-	-	-	-
MCF received during period	12	10,909	-	_	_	_	11,310,365	173,049,536
MCF burned during period	12	10,909	-	-	-	_	11,310,365	173,049,536
Ending balance	-	-	-	-	-	-	-	-
Biogas Data:								
Beginning balance	_	_	-	_	_	_	_	_
MCF received during period	_	_	-	_	_	_	4,508	70,364
MCF burned during period	_	_	-	_	_	_	4,508	70,364
Ending balance	-	-	-	-	-	-	-	-
Limestone/Lime Data:								
Beginning balance	_	_	-	_	_	_	74,911	93,299
Tons received during period	_	-	_	_	-	_	13,624	118,575
Inventory adjustments	_	_	_	_	_	_	.0,024	2,400
Tons consumed during period	_	_	_	_	_	_	2,554	128,291
Ending balance	_	_		_	_	<u>-</u>	85,983	85,983
Cost of ending inventory (\$/ton)	_	<u>-</u>		_	_	<u>-</u>	48.99	48.99
Oost of ending inventory (wholl)	-	-	-	-	-	-	40.33	40.99

DUKE ENERGY PROGRESS ANALYSIS OF COAL PURCHASED MAY 2023

STATION	ТҮРЕ	QUANTITY OF TONS DELIVERED	DELIVERED COST		DELIVERED COST PER TON	
MAYO	SPOT CONTRACT FUEL MANAGEMENT AGREEMENT FIXED TRANSPORTATION/ADJUSTMENTS	85,797 - -	\$	9,422,240 (376,439) 305,578	\$ - 109.82 -	
	TOTAL	85,797	\$	9,351,379	\$ 108.99	
ROXBORO	SPOT	-	\$	-	_	
	CONTRACT FUEL MANAGEMENT AGREEMENT FIXED TRANSPORTATION/ADJUSTMENTS	85,315 -		10,125,177 (37,505)	\$ 118.68	
	TOTAL	85,315	\$	1,007,228 11,094,900	\$ 130.05	
ALL PLANTS	SPOT	_	\$	-	_	
	CONTRACT FUEL MANAGEMENT AGREEMENT FIXED TRANSPORTATION/ADJUSTMENTS	171,112 - -	·	19,547,417 (413,944) 1,312,806	\$ 114.24	
	TOTAL	171,112	\$	20,446,279	\$ 119.49	

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DUKE ENERGY PROGRESS ANALYSIS OF COAL QUALITY RECEIVED

MAY 2023

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
MAYO	5.95	10.75	12,546	1.52
ROXBORO	6.45	12.00	12,244	1.11

DUKE ENERGY PROGRESS ANALYSIS OF OIL PURCHASED MAY 2023

MAYO	ROXBORO

VENDOR	Greens	boro Tank Farm	Gree	nsboro Tank Farm
SPOT/CONTRACT		Contract		Contract
SULFUR CONTENT %		0		0
GALLONS RECEIVED		291,504		119,762
TOTAL DELIVERED COST	\$	968,339	\$	398,491
DELIVERED COST/GALLON	\$	3.32	\$	3.33
BTU/GALLON		138,000		138,000

Notes:

Prior month adjustments for Blewett, Wayne County and Weatherspoon are excluded.

Duke Energy Progress Power Plant Performance Data Twelve Month Summary Report Period: June 2022 - May 2023

Unit	Net Generation (MWH)	Capacity Rating (MW)	Capacity Factor (%)	Equivalent Availability (%)
Brunswick 1	8,290,009	938	100.89	98.28
Brunswick 2	7,354,375	932	90.08	89.80
Harris 1	7,841,560	964	92.86	91.32
Robinson 2	5,623,956	759	84.59	82.86

EAF is calculated using Standard NERC calculation and excludes OMC events

Twelve Month Summary June, 2022 through May, 2023 Combined Cycle Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,324,400	225	67.19	81.63
Lee Energy Complex	1B	1,201,787	227	60.44	74.00
Lee Energy Complex	1C	1,347,292	228	67.46	80.91
Lee Energy Complex	ST1	2,525,391	379	76.07	86.40
Lee Energy Complex	Block Total	6,398,870	1,059	68.98	81.55
Smith Energy Complex	7	880,899	193	52.10	58.12
Smith Energy Complex	8	859,597	193	50.84	58.13
Smith Energy Complex	ST4	979,452	184	60.77	63.81
Smith Energy Complex	9	1,358,606	215	72.14	80.51
Smith Energy Complex	10	1,357,471	215	72.08	81.20
Smith Energy Complex	ST5	1,877,268	252	85.04	88.36
Smith Energy Complex	Block Total	7,313,293	1,252	66.68	72.85
Sutton Energy Complex	1A	1,237,047	224	63.04	73.30
Sutton Energy Complex	1B	1,231,900	224	62.78	73.03
Sutton Energy Complex	ST1	1,524,951	271	64.24	84.12
Sutton Energy Complex	Block Total	3,993,898	719	63.41	77.29
Asheville CC	ACC CT5	1,366,152	190	82.08	83.19
Asheville CC	ACC CT7	1,044,775	190	62.77	78.08
Asheville CC	ACC ST6	689,906	90	87.51	87.84
Asheville CC	ACC ST8	527,166	90	66.87	76.56
Asheville CC	Block Total	3,627,999	560	73.96	81.14

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- Data is reflected at 100% ownership.

Twelve Month Summary June, 2022 through May, 2023

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	949,348	713	15.20	54.17
Roxboro 2	1,463,436	673	24.82	68.80
Roxboro 3	1,180,832	698	19.31	73.07
Roxboro 4	531,661	711	8.54	48.30

Notes:

 Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

Twelve Month Summary June, 2022 through May, 2023 Other Cycling Steam Units

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Roxboro	1	502,577	393	14.61	78.70

Notes:

Twelve Month Summary June, 2022 through May, 2023 Combustion Turbine Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	325,863	370	93.68
Blewett CT	190	68	94.66
Darlington CT	88,523	264	90.53
Smith Energy Complex CT	1,691,218	960	77.64
Sutton Fast Start CT	9,820	98	97.53
Wayne County	307,503	968	79.72
Weatherspoon CT	846	164	92.21

Notes:

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Twelve Month Summary June, 2022 through May, 2023 Hydroelectric Stations

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	114,527	27.0	94.18
Marshall	157	4.0	99.99
Tillery	170,670	85.0	80.69
Walters	311,239	113.0	55.23

Notes:

 Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.